

Appn. Number 10/622,289 (McPheeters et al.) Art Unit 1615 Amendment

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TITLE

Onc time use disposable styptic product.

CROSS-REFERENCE TO RELATED APPLICATIONS

"Not Applicable"

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

"Not Applicable"

THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT

"Not Applicable"

INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC

"Not Applicable"

BACKGROUND OF INVENTION

1. Field of the Invention

This invention relates to an applicator specifically to improve the application of styptic onto body tissues.

2. Description of Related Art

Previously applicators for the purpose of applying styptic onto body tissue suffered from many drawbacks. In Patent 1712667, Thomas A. Hart May 14, 1929 and Patent 2157743, George W. Temple May 9, 1939 it discloses a method of styptic application requiring a user to insert a reusable applicator attached to the inside of a container lid into a solution stored within the container, then apply the applicator directly to body tissue. After using the applicator it is placed back into the container where it is stored along with the contained solutions until its next occasion of use. Although the above-mentioned inventions may be effective

in stopping bleeding, they also bear great risks previously unknown. In today's society, with the increased knowledge of the spread of blood borne diseases such as HIV and AIDS it is not safe to allow a soiled reusable applicator to come into contact with and contaminate a solution that is intended for future use.

In Patent 3327706, William R Watson, Sr. June 27, 1967 and Patent 3506009, Raffaele Di Pietro April 14, 1970 the safety issues of a reusable applicator is remedied by presenting an application method that allows for disposable applicators but has an obvious drawback in that the applicators are packaged in a "matchbook" design. The shortcomings of this design are that by not individually wrapping the product it remains exposed to environmental contaminants and therefore cannot be trusted to hold an acceptable level of sanitation.

Shown in Patent 3948265, Safwat Daoud Al Ani April 6, 1976 the above mentioned disadvantages associated with contamination in a reusable applicator and the disadvantages associated with contamination in a matchbook design have been address by presenting an individually wrapped and disposable applicator. At the time of invention of Patent 3948265, Safwat Daoud Al Ani April 6, 1976 the risks associated with blood borne diseases such as HIV and AIDS were unobvious and therefore were not addresscd. The drawback to not addressing such issues are that by having a non-liquid absorbing applicator that carries only a thin layer of product on the end or ends in such a quantity as to equal one exact dose, a person using the applicator with styptic on it only achieves the benefit of an immediate stop to bleeding but is left with existing blood on the skin that will form into a scab that can be more apt to re-open and cause a continuation of bleeding and increase in blood borne disease risk from further contact until healed.

Accordingly, there is a need for a single applicator for the application of styptic product that is safe from contamination before use, stops bleeding during use and carries on it an amount of styptic thick enough to allow for absorption and removal of blood presented from minor cuts, scrapes, skin abrasions and the like which helps reduce the risks associated with blood borne diseases.

BRIEF SUMMARY OF INVENTION

The proposed invention is to provide a sanitary, individually wrapped, one time use applicator for the application of styptic which eliminates the above mentioned disadvantages by applying a rather thick non-precise dose of styptic to the body tissue to stop bleeding caused by cuts, scrapes, skin abrasion and the like. Another advantage to the invention is to provide an applicator which carries a sufficient amount of styptic as to allow for absorption and removal of blood present on skin caused by cuts, scrapes, skin abrasions and the like. Still another advantage is to provide an applicator that by removing present blood helps in reducing the risks associated with the transfer of blood borne diseases by eliminating exposure to others. Advantages in regards to sanitation are provided by the applicator being individually wrapped as air tight as possible. Further

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objects and advantages of our invention will become apparent from the consideration of the included drawings and descriptions.

BRIEF DESCRIPTION OF DRAWINGS

The invention will be more fully understood and further advantages will become apparent when reference is made to the following detailed description of the invention and the accompanying drawings in which:

Fig. 1 shows in a schematic side elevation one embodiment of an applicator with styptic attached at one end according to the invention.

Fig. 1a shows a sectional side view of the applicator shown in Fig. 1.

Fig. 2 shows in a schematic side elevation one embodiment of an applicator with styptic attached at both ends according to the invention.

Fig. 2a shows a sectional side view of the applicator shown in Fig. 2.

DETAILED DESCRIPTION OF THE INVENTION

The inventive applicator shown in drawings Fig. 1 and Fig. 1a annexed hereto is shaped as a longitudinal stem 1, having at one end, a thick, homogeneous layer 2 of a dried and porous styptic. The inventive applicator shown in drawings Fig. 2 and Fig. 2a annexed hereto is shaped as a longitudinal stem 1, having at both ends, a thick, homogeneous layer 2 of a dried and porous styptic. The schematic applicators shown in the drawings are only an example, which may not be considered as a restriction of the scope of invention.

The entire applicator according to the invention, i.e. stem carrier of the styptic is made of suitable natural or man made materials such as wood, glass, plastic or the like. No special preparation is needed for the end(s) portion of the stem. The shape and size of the applicator varies due to the field of application.

Applicators which for instance shall be used on finger nail cuticles can be made small, some two or three inches long and three to four millimeters in diameter, in the form of a rod with pointed or blunt end(s), whereas applicators which shall be used for instance on a knee that has been scraped on the other hand ought to be made longer than the finger nail cuticle applicators and they shall also have a more robust form.

The applicator end or ends can for instance be pointed blunt, spherical or they can be given the form of a spatula or any other form suitable for the application purpose. The handle of the applicator -- the stem -- can be straight or bent to any form in order to obtain the easiest or the best way of application for different purposes.

The styptic is applied at the end(s) of the applicator in appropriate doses for the intended purpose. The styptic may if it is necessary be mixed with other substances e.g. preservatives, neutral substances such as viscosity improving material, binders, adhesives etc.

Application of the styptic to the stem is carried out by any suitable application method e.g. by controlled dipping of the end(s) of the applicator in a solution of styptic, by casting a mold where a styptic solution surrounds the applicator or by fitting to the applicator with a suitable adhesive.

Sterilization of the applicators shall be carried out according to well known methods either before or after the applicator has been packed. The method of sterilization is also dependent on the properties of the styptic and on the nature of the packing.

The packing of the applicators after application and drying of the styptic shall preferably be as air-tight as possible in order to prevent the applicator from contact with contaminants in the environment. The applicators shall also if so required be protected from light and any other harmful environmental factors.

The wrapping can be a one use disposable wrapping whereby cross contamination can be eliminated. The packaging however of the individually wrapped applicators may contain several applicators.

The wrapping can be made of any suitable material e.g. plastic, paper or the like.

The technique of using the inventive applicator is very easy to learn. The applicator is pulled out from its wrapping and the end(s) of the applicator on which the styptic is already applied is brought into contact with a cut, scrap or skin abrasion area whereby the styptic stops active bleeding and absorbs the small amount of present blood.